

December 18, 1995; and WIPO Publication WO 00/33239 published June 8, 2000;] and PCT/US00/15624 filed June 7, 2000, published as WO 00/75856 A1; each said application being commonly owned by Assignee, Metrologic Instruments, Inc., of Blackwood, New Jersey, and incorporated herein by reference as if fully set forth herein.

#### AMENDMENT OF THE CLAIMS TO INVENTION

Please cancel Claims 1-32 without prejudice or disclaimer and add Claims 33-37 as follows:

33. In a planar light illumination and imaging (PLIIM) system, a planar light illumination module (PLIM) of compact construction for producing a planar laser illumination beam (PLIB) which emanates substantially within a single plane along the direction of beam propagation towards an object to be optically illuminated and imaged, said PLIM comprising:

a module housing having an axial extent, first and second end portions, a central bore formed along said axial extent, and a recess integrally formed in said second end portion;

a visible laser diode (VLD) mounted along said bore at said first end portion of said module housing, for producing a laser beam generally along said axial extent;

a focusing lens mounted along said bore between said first and second end portions, for focusing said laser beam to a predetermined focal point; and

a laser beam expansion element mounted within said recess at said second end portion of said module housing, and expanding said laser beam along a predetermined direction and producing a substantially planar laser illumination beam from said beam expansion component.

34. The PLIM of claim 33, wherein said beam expansion component comprises a cylindrical lens element mounted within said recess.

35. The PLIM of claim 33, wherein said focusing element is micro-oscillated so that said planar laser illumination beam is micro-oscillated laterally along its planar extent.

36. The PLIIM of Claim 33, wherein said recess has a wedge-like geometry.

37. In a PLIIM system, a planar laser illumination module (PLIM), said PLIM comprising:
- a laser diode for producing a laser beam;
  - a focusing lens for focusing said laser beam to its minimum beam width at a point which is the farthest distance at which said PLIIM based system is designed to capture images, and
  - a cylindrical lens element for expanding (i.e. spreading out) said laser beam along the direction of beam propagation so that a substantially planar laser illumination beam (PLIB) is produced, which is characterized by a plane of propagation that is coplanar with the direction of beam propagation.

AMENDMENT OF THE ABSTRACT:

Please amend the Abstract as follows:

--In a planar light illumination and imaging (PLIIM) system, a planar light illumination module (PLIM) of compact construction produces a planar laser illumination beam (PLIB) which emanates substantially within a single plane along the direction of beam propagation towards an object to be optically illuminated and imaged. The PLIM comprises a module housing which has an axial extent, first and second end portions, a central bore formed along the axial extent, and a recess integrally formed in the second end portion. A visible laser diode (VLD) is mounted along the bore at the first end portion of the module housing, for producing a laser beam generally along the axial extent. A focusing lens is mounted along the bore between the first and second end portions, for focusing the laser beam to a predetermined focal point. A laser beam expansion element is mounted within the recess at the second end portion of the module housing, and expanding the laser beam along a predetermined direction and producing a substantially planar laser illumination beam from the beam expansion component.--

REQUIREMENT UNDER 37 C.F.R. 1.121

As required under 37 C.F.R. 1.121, a clean version of the first paragraph of Page 1 is as follows:

This is a Continuation of copending U.S. Application No. 09/721,885 filed September 17, 2001, which is a Continuation-in-Part of copending Application Serial No. 09/327,756 filed June 7, 1999, and PCT/US00/15624 filed June 7, 2000, published as WO 00/75856 A1; each said application being commonly owned by Assignee, Metrologic Instruments, Inc., of Blackwood, New Jersey, and incorporated herein by reference as if fully set forth herein.

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Also required under 37 C.F.R. 1.121, a clean set of the amended Claims is as follows:

33. A planar light illumination module (PLIM) of compact construction for producing a planar laser illumination beam (PLIB) which emanates substantially within a single plane along the direction of beam propagation towards an object to be optically illuminated, said PLIM comprising:

a module housing having an axial extent, first and second end portions, a central bore formed along said axial extent, and a wedge-like recess integrally formed in said second end portion;

a visible laser diode (VLD) mounted along said bore at said first end portion of said module housing, for producing a laser beam generally along said axial extent;

a focusing lens mounted along said bore between said first and second end portions, for focusing said laser beam to a predetermined focal point; and

a laser beam expansion element mounted within said wedge-like recess at said second end portion of said module housing, and expanding said laser beam along a predetermined direction and producing a substantially planar laser illumination beam from said beam expansion component.

34. The PLIM of claim 32, wherein said beam expansion component comprises a cylindrical lens element mounted within said wedge-like recess.

35. The PLIM of claim 32, wherein said focusing element is micro-oscillated so that said planar laser illumination beam is micro-oscillated laterally along its planar extent.

36. The PLIIM of Claim 33, wherein said recess has a wedge-like geometry.

37. In a PLIIM system, a planar laser illumination module (PLIM), said PLIM comprising:  
a laser diode for producing a laser beam;

a focusing lens for focusing said laser beam to its minimum beam width at a point which is the farthest distance at which said PLIIM based system is designed to capture images, and

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a cylindrical lens element for expanding (i.e. spreading out) said laser beam along the direction of beam propagation so that a substantially planar laser illumination beam (PLIB) is produced, which is characterized by a plane of propagation that is coplanar with the direction of beam propagation.